



Article

Co-Constructing Knowledge for Action in Research Practice Partnerships

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Abstract: Community-engaged research (CER) aspires to co-construct knowledge for action in groups that recognize people's varied expertise and engage in democratic decision making. The CER literature has chronicled these processes in small participatory collectives but is less clear on the strategies or principles that guide collaborative approaches to data analysis in research partnerships that have hundreds of contributors playing distinct roles. The purpose of this paper is to critically assess and describe strategies for co-constructing knowledge with students and teachers who participated in a study that grew out of a broader research–practice partnership. In Part I of our findings, drawing on the concept of prefigurative experiments, we discuss the collaborative practices in our research team that took shape as we prepared data claims to share with students and teachers. In Part II, we discuss sessions interpreting the data with students and teachers in which they conveyed the emotional, embodied, and relational dimensions of student voice experiences. We conclude by discussing how this effort to be accountable to and in relationship with students and teachers, while incomplete on its own, spurred the design of new practices for democratizing data analysis and knowledge production in our research–practice partnership.

Keywords: community-engaged scholarship; youth voice; research–practice partnerships; co-construction of knowledge; prefiguration; politicized care



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1. Introduction

On a Wednesday evening in February 2021, a group of high school students, university students, professors, and educators came together over Zoom to analyze qualitative data. COVID-19 rates had soared the previous month; school had been “virtual” since March of 2020, and it felt like online meetings had become the new normal. The convening was an opportunity for the university research team to share emergent findings with student participants in a district-run social justice youth program called Student Voice and Leadership (SVL). The research team, called Critical Civic Inquiry (CCI), had selected excerpts from interviews and field notes that spoke to two topics developed based on suggestions from SVL educators and student interns: how veteran students mentor new team members and how students navigate pushback from adults when engaged in activism.

One of the excerpts was a student's story about her effort to persuade a school resource officer that he should not park his police car on the sidewalk in front of the school's entrance. In the interview, the student recounted the discussion with the officer who visited her SVL class after students had spoken up about the issue:

I brought up the fact that not all students feel safe. Not all students consider a person in uniform as, you know, “safety”. And he didn't like that, and I told him that like—“I

understand your need to come here and validate yourself, but you need to understand that we're not targeting you. We're targeting what you represent. We're . . . addressing what you represent. And what this means to students of color and the . . . negative experience that they've had with police officers, and how sometimes you reinforce that, that already pre-established idea of the cops." And he didn't understand where we were coming from. And he left thinking that we would never bring it up again. That he had established authority . . . and then nobody was going to question him again. Except the fact that we still believe what we believed before and despite him being there and telling us all these negative things about our community and how [name of school] is a "high-risk" school and labeling us as basically "deviant," and how, you know, we're not like "great students." That discussion for us reinforced the fact that, you know, that we need to speak up for ourselves or else nothing's going to happen.

After the students had read the excerpt, the university breakout group facilitators asked, "What strategies did the student use to persuade or find common ground with the SRO?" The first respondent said, "I liked how a student stood up for their peers, even if it didn't go so well." The second said they were inspired by the "bravery" demonstrated by the student in the interaction.

As we elaborate later in the paper, these responses showed how necessary and valuable it is to co-construct meaning about data alongside young people. Whereas the research team's initial interpretation focused on an analytic word—"strategies"—the student responses focused on the relational and emotional dimensions of the interaction. The student comments underscored how important it is that research about transformative student voice attends to the embodied, relational, and emotional dimensions of student experience, especially given the stakes when young people are challenging adults with positional authority (Fox 2015).

This example of collaborative meaning-making with SVL students is part of a broader research practice partnership (RPP) between CCI and SVL. During the 2020–2021 academic year, SVL included four professional staff, more than 25 teachers, and around 250 high school students from 23 schools. Although the research team and professional staff had worked together for several years and developed a sense of mutual trust and accountability, the research team did not necessarily have the same deep relationships with the students and teachers or ongoing routines to look at data together. In community-engaged research (CER) projects such as this, which have a clear division of labor between researchers and community partners, how can we still design opportunities for meaningful sense-making and co-production of knowledge to inform praxis?

This question is important for the CER field because the CER literature, especially in education, tends to focus on projects carried out by relatively small or bounded collectives, such as in Critical Participatory Action Research (Camarota and Fine 2008; Sandwick et al. 2018). It is sometimes the case, however, that community-engaged research, even when the political aims are shared, relies on a more pronounced division of labor, where university researchers carry out data collection and analysis in the service of activist and educator projects, such as the research used to support community organizing for police-free schools (Center for Popular Democracy 2021) or research to document the achievements of an equity initiative in a school district (McKinney de Royston et al. 2017; Vakil et al. 2016). Of this latter form of CER, it is typical that the primary "community partners" for that work are senior staff or executive leadership and that the other key members play more secondary or peripheral roles (e.g., Kirshner et al. 2018; Oakes and Rogers 2006). This kind of division of labor may be advantageous for large scale projects or in cases where community partners say it works best for them (Oakes and Rogers 2006). Although not reaching the same heights of democratic participation found in Critical or Youth Participatory Action Research (CPAR and YPAR, respectively), partnerships such as these are still important for CER praxis; they offer their own opportunities for critical and collaborative knowledge production for social change.

After providing background on our partnership and the reflective process we used to write this paper, we organize our claims for this reflective paper into two parts. Part I analyzes the process by which the university research team (diverse across lines of age, gender, race/ethnicity, class, and education degree) worked together to identify emergent claims to share with students and teachers. We draw on the concept of *prefiguration*, which Boggs (1977) described as ongoing efforts to embody within a movement “those forms of social relations, decision making, culture, and human experience that are the ultimate goal” (p. 100). We argue that the research team attempted to enact, in their work with each other, the intended end goals of our RPP—democratic knowledge construction for justice that attends seriously to power and positionality. Collaborative practices *prefigured* the ways we wanted to work with students and teachers.

Part II identifies lessons from two online sessions where the research team facilitated collaborative meaning-making about excerpts from field notes and interviews. We argue that these sessions, although incomplete and inadequate on their own, show evidence of the expanded insights gained through analyzing data with students and teachers. Even in CER projects with a division of labor between researchers and participants, where opportunities for co-production of knowledge are more limited than CPAR or YPAR, it is still possible to generate new knowledge and insight. As we discuss in our conclusion, these insights have also mattered for our partnership, where we are in the middle of designing and enacting new practices that build on lessons from these sessions.

Our paper is authored by a team of eight people, comprising SVL staff (Lopez, Terrazas Hoover, and Landa-Posas), a graduate student (Campanella), three undergraduate students (Mendy, Porrás-Holguin, and Estrada Martín), and a university professor (Kirshner). As is common when writing about community-based collaborative research, selecting pronouns is challenging. We generally use the pronoun “we” to refer to the whole group of authors, but when we need to be more precise, we denote either the CCI research team or the SVL team, or specific members of each, in the third person.

2. Key Concepts

2.1. Prefiguration

Prefiguration can be broadly conceptualized as the efforts by groups and movements to enact desired futures today (Boggs 1977; Breines 1989; Polletta 2002; Alexander 2005) and in so doing “‘inspire’ change” (Yates 2015, p. 19). Though sometimes invoked in race-evasive ways (Annamma et al. 2017), such as the class-centered rhetoric of the Occupy Wallstreet movement, scholars of women-of-color feminist praxis and queer theories have reinterpreted the idea with attention to intersectionality and power, orienting toward possible futures, rather than nostalgia for romanticized and ahistorical pasts (Lin et al. 2016; Uttamchandani 2021). Everyday people prefigure as a means for survival (Lin et al. 2016).

Prefigurative work has also been taken up in the design of collaborative research for action among community-engaged learning scientists (Uttamchandani 2021). Gutiérrez, for example, developed the term social design experiments to conceptualize research projects that intervene to ameliorate historical injustices and organize more just futures (Gutiérrez 2016; Freeman and Jurow 2018). Vossoughi and Booker (2017) call for research on learning that is centered on the “lived dynamics and complexities of prefigurative activity” where “social actors are making everyday and moment to moment efforts to express the deeper *ends* of their shared activity in the *means*, working to craft new relations in and through the process of enacting possible worlds” (p. 228, emphasis in original). Similarly, although not using the same term, the Right2Learn Dignity Lab has made this concept central to its efforts, in that they are purposeful about treating each other with the dignity that they are trying to make central to teaching and learning in public schools (Espinoza 2021; Espinoza and Padilla-Chavez 2021). Drawing on this work, we use the idea of experimentation in this paper to refer to an “experiment in” new ways of living out our values and learning through the process, not “experimenting on” students and communities in extractive or destructive ways (Smith 1999; Patel 2015).

Although we did not have the language of prefiguration when starting out, we aimed to embody the values that animated our larger partnership while preparing for and carrying out the 2021 sessions with the SVL students and teachers. Describing our work as a prefigurative experiment allows us to reflect and act on the mis/alignment between our means for co-constructing knowledge within this attempt and our vision for collaborative knowledge and future building as a partnership. We see prefiguration as one part of building more just futures that by itself is not sufficient to overturn hegemonic systems of oppression (Bookchin 1995; Breines 1989; Gordon 2017) but which nevertheless helps us to make progress.

2.2. Politicized Care

A core element of our experiment in living our values was to show care for each other along the way. Relationships of care among students and educators are central to educational theorizing (Antrop-González and De Jesús 2006; Noddings 1992; Valenzuela 1999). Recently, scholars have argued for notions of care to be situated more explicitly in a political context, in ways that have implications not just for teacher–student relations but also community-engaged research collaboratives. McKinney de Royston et al. (2017), for example, describe the way Black educators demonstrated a politicized care for Black students that stemmed from political clarity (Beauboeuf-Lafontant 1999) about institutionalized oppression, affirmed the students' potential, and was "physically enacted in real-time interactions" to disrupt inequitable and uncaring systems (p. 8).

In a related line of scholarship, Vakil et al. (2016) discussed two cases that illustrated the formation and persistence of politicized trust in university community relations. In one, university researchers gained initial solidarity through their shared identity as Black educators committed to developing emancipatory programming for Black students but had to work to maintain trust when the natural arc of the research fell out of alignment with institutional timelines and needs. In the other, solidarity between the white researcher and the Black and Latinx students was fragile but stitched together by shared commitment to the political aims of the project. The cases show how trust is not merely an interpersonal accomplishment or the product of good intentions but tied to shared risk-taking and political solidarity. Working to enact politicized care in the CCI and SVL teams' relationships and systems for collaboration, knowledge building, and decision making was particularly important for us as a multi-age, multi-class, and multi-racial group living and working through multiple and overlapping crises in 2020, which impacted members differentially.

2.3. Co-Construction of Knowledge

The practice of the collaborative construction of knowledge among university researchers and community members has several lineages. In what Wallerstein and Duran (2018) refer to as the Northern tradition (more typical in Europe and North America), participatory research in private industry or the education sector aims to make systems more efficient by enlisting insiders who are closest to a problem to help identify solutions. Student voice programs, for example, are sometimes justified using market-based language and metaphors of the student-as-customer. In contrast, approaches to collaborative research influenced by approaches from South America, South Asia, and Africa situate knowledge production in the broader social change projects and critiques of Eurocentric knowledge regimes (Cammarota and Fine 2008; Fals-Borda 1987; Patel 2015; Reyes Cruz 2008; Smith 1999).

The partnership between CCI and SVL is organized around the latter rationale for co-constructing knowledge, particularly regarding Freirean commitments to critical pedagogy, praxis, and the essential role of people experiencing oppression or inequality in developing new critically conscious understandings (Freire 1970). Working in this more critical tradition of community-engaged research, Gordon da Cruz (2017) identifies specific questions that research collectives should ask of themselves about the knowledge-construction process. Gordon da Cruz suggests, for example, that teams ask, "are we authentically locating

expertise?” and to consider if they are “privileging the expertise of members of marginalized communities on their own lives” (p. 373). This commitment to an open and democratic approach to meaning making is supported by Hill Collins’ (2000) articulation of Black Feminist Epistemology, including lived experience as a criterion for meaning, the use of dialogue in assessing knowledge claims, and caring relations.

These three ideas—prefiguration, politicized care, and co-construction of knowledge—offer language to understand and convey the story of our partnership efforts last year. The concept of prefiguration, anchored in politicized care, evokes how the CCI team aimed to develop relations internally that practiced the kinds of meaning-making and interpersonal relations that we sought to achieve more broadly within the research practice partnership. Critical conceptions of knowledge construction, which decenter the positional role or degree level as a criterion for expertise and re-center lived experience and insights from experiences of marginalization, are woven throughout the process of knowledge construction for action, both within the CCI team and in the collaborative meaning making with students and teachers.

3. Organizational Background

3.1. District Partner Program

SVL is an initiative within Denver Public Schools (DPS), rooted in education liberation for students and teachers in an effort to transform and rethink education. The initiative, which has evolved significantly since its origins as a district-wide student council, centers students’ beautiful and precious knowledge, leadership skills, team building, policy-development, and opportunities for action. SVL is funded by the district, with supplemental funds from grants and donations. Student-facing programs include Challenge 5280, Student Board of Education (SBOE), Young African American and Latinx Leaders (YAALL), and the Superintendent Student Cabinet. Additionally, SVL runs adult-facing professional development programs for educators involved in Challenge 5280, individual teachers implementing this work in their academic classrooms, and whole schools working to integrate student voice throughout their buildings. Although specific programs vary, work with students tends to follow a participatory action research cycle: students draw on lived experience, critical reflection, and systematic inquiry to develop more just and student-centered education policies. All of this is conducted in close partnership between students and adults.

During the time of this writing, SVL was led by three staff members, based in the central district office, who utilized an organizing model to build community and power among students. SVL’s SBOE currently operates in 23 high schools throughout the district. Each school-level SBOE team can have anywhere from 5 to 30 students involved. Within that group of students, two to three act as “representatives” who co-lead their team with a teacher or counselor, who is called a “Coach”. The following example of one SBOE team illustrates the approach, praxis, and framework of SVL.

3.2. An Example: Students Lead the Reunification of Moraga High School

In the fall of 2019, SVL staff joined one of the Moraga Campus SBOE meetings. The SBOE team representing “Moraga Campus”, made up of Moraga Leadership Academy and Moraga Early College, talked about how the co-location of their two schools did not allow for community spirit or school culture to flourish. Prior to 2019, there was only one coach from one school running the SBOE team at the campus, which made it difficult to engage in conversation related to co-location. Once two coaches, one from each school, paired up to recruit and work with students from both schools, they were able to strengthen dialogue around the issue of co-location from the perspectives of both schools. As the year went on, student conversations transitioned toward the root problems caused by the campus’ division into separate schools, such as the lack of resources and limited course variety. With the help of their coach, the students learned the history of the 1969 Moraga High School Blow Outs, a series of massive student-led walk outs and marches to protest the

racist treatment of Chicana students at the school that were met repeatedly with violent suppression by Denver Police. Braced with this new knowledge of the strong student advocacy that once existed in their school hallways and how crucial the school had been to a sense of community in the region, the students sought to gain buy-in for the reunification of their schools from the broader student body, teachers, school leadership, alumni, and families. They administered surveys and held community conversations with each of these groups and analyzed the themes that emerged. Equipped with their research, they developed a reunification plan and shared it with district leadership. In 2020, the DPS Board of Education announced that Moraga campus would be reunified. Renewed student activism was a contributing factor in this decision.

This effort, led by student leaders with guidance from adults, illustrates the fluid and ongoing nature of SVL's work. SVL's programming follows a school-year cycle, but SVL is intentional in supporting students to pass the torch to the students coming behind them and in encouraging adults to patiently let the work unfold on the students' time, without usurping power. This story also speaks to the liberatory pedagogies and Indigenous epistemologies that SVL holds dear. Only after students had inquired into the root cause of their issue, looked back to their community history, and solicited the views of community members were they able to develop a lasting solution.

3.3. Research Group

Dr. Shelley Zion, Dr. Carlos Hipolito-Delgado, and Dr. Ben Kirshner have collaborated with community educators, classroom teachers, and students since 2010 to develop a set of curricular resources called Critical Civic Inquiry (CCI). CCI, drawing on the frameworks of YPAR, anti-racist education, and sociopolitical development (Akorn et al. 2008; Irizarry 2011; Torre and Ayala 2009), emphasizes five practices, summarized in Table 1. CCI is used by SVL and aims to center the life experiences, funds of knowledge, and aspirations of marginalized and minoritized youth, while also creating opportunities that expand their knowledge and skills as leaders and agents of change (Kirshner et al. 2021; Paris and Alim 2014; Watts and Flanagan 2007; Zion 2020). Research about CCI has documented young people's agency and activism to transform their schools and the work of skillful teachers who facilitate opportunities for students to discuss issues such as racism and xenophobia and develop sophisticated policy proposals (Hipolito-Delgado and Zion 2017; Kirshner 2015).

Table 1. CCI Principles.

Principle	Description
Sharing Power	Educators work to learn about young people's lives and the kinds of knowledge they develop outside of school; they engage students in shared decision making and planning.
Critical Questions	Educators invite students to discuss topics that connect academic content to issues of race, ethnicity, power, and privilege.
Participatory Action Research	Students study an issue that affects them directly and develop policy solutions. Students learn how to collect and analyze original data, such as through interviews, surveys, or archival research.
Public Audiences and Impact	Students formulate an evidence-based policy argument that they share with external audiences.
Youth-Adult Partnerships	Schools and districts adopt youth-adult partnerships to implement changes proposed by students and catalyze new ideas and planning.

3.4. Origins of the Partnership between SVL and CCI

The partnership between SVL and CCI is rooted in relationships. Community is the special ingredient. It started when Lopez was introduced to Kirshner by a graduate student and non-profit executive director named Ginnie Logan. Initially, Lopez was not interested in meeting with Kirshner or learning more about PAR. She was protective of the work she was leading in the district. She had limited experience with researchers, and the experiences she did have had not been positive. It took some convincing before Lopez agreed to meet with Kirshner to discuss a possible partnership. Once the connection was made, an organic exchange transpired. Lopez explains:

Over time we came to see how our partnership embodies critical values that allow us to build trust and operate as a team. We collectively practice transparent communication and respect our roles. Our researcher partners do not position themselves as superiors, but as thought partners. They offer feedback and input, share expertise, knowledge and resources, space, and community. They embed their work in our strategy. It is a shared learning space that uplifts the work.

SVL staff and CCI researchers, beginning in 2017, worked closely to strengthen and sustain a transformative student voice in the district, write grants, and share knowledge with broader publics. Lopez and Kirshner, for example, have given presentations about the work at national conferences and grantee convenings. In August 2021, SVL staff and CCI researchers presented the SVL model and research findings to the district Board of Education. Other members of the CCI team work closely with counterparts in SVL to collaboratively design and lead teacher professional development or, as part of their ethnographic research at a subset of schools, help students develop survey questions.

In these ways, the work that we do together embodies the kinds of relationality, trust, and mutual accountability called for in critical community-engaged research (Patel 2015). At the same time, we must ask ourselves: where are the SVL students and teachers in this collaborative work? They, too, are members of SVL; they challenge school decision makers and advance justice projects at their schools. How might we do a better and more systematic job of co-producing knowledge for action with them? Questions such as these motivated us, in the summer of 2020, to step back and pause. CCI researchers had recently completed two years of data collection about teaching and learning in SVL and wanted to analyze the data in ways that were accountable to SVL students and coaches. We wanted to share the initial findings that would be of interest or use to students and coaches and engage them in collaborative meaning-making.

3.5. Co-Constructing Lines of Data Analysis

In early September 2020, Porrás-Holguin and Campanella met to brainstorm questions that would guide their analysis of the data during the coming year. They sought out feedback from SVL counterparts about promising lines of analysis. The SVL staff and two student interns expressed support for the general idea but pushed the CCI researchers to clarify and bring out the political dimensions of the research questions. SVL staff, students, and coaches were active in racial justice organizing; the meeting took place just a couple of months after the height of the summer 2020 uprisings. SVL students had played pivotal roles in a coalition that led the school board to end its contract with the city police department in July 2020.

SVL staff wanted the CCI researchers to look for examples where students dealt with pushback from adults protecting power or resisting system change. One student intern asked in the chat, "My only real question/comment is how are we leveling the playing field when it comes to student and adult partnerships? and what does that look [like] in real time and relationships?" SVL staff noted that some educators labelled some SVL students as too political or as troublemakers. In addition, a new question was raised by the same student intern around care practices. She wrote in the chat, "as an activist, self care was

always an afterthought, how can i keep doing this work as much as I can as best as I can?" Ultimately, the group landed on the following questions to guide systematic analysis:

1. How do teams go about mentoring new students/bringing new students onto the team?
2. What tactics have been effective for making school level changes? How do teams deal with pushback from adults? (In particular, how to deal with pushback about "being too political".)
3. How are SVL students taking care of themselves as they engage in activism?

The SVL staff and students' pushes to make explicit the political and felt dimensions of the questions underscores how the framing of research questions is itself important to the collaborative construction of critically conscious knowledge (Gordon da Cruz 2017). Workshopping and then revising draft questions with the SVL staff and student interns got us closer to these kinds of processes. We note, however, that we fell short of engaging a more representative group of students in finding out what kinds of questions would be most interesting to them to explore.

4. Methodology for This Paper

This paper is not a conventional research study. As with many participatory research projects, our analysis blends reporting on our findings with reflecting on our process (Lac and Fine 2018). Our aim is to contribute to community-engaged scholarship by going "behind the scenes" to describe how we set up collaborative routines and designed sessions with students and coaches and by inviting the CER community into dialogue as we wrestle with the tensions and opportunities facing RPPs such as ours, which have hundreds of contributors playing unique roles.

4.1. Who We Are

We believe research is made more rigorous by a scholar's conscious reflection on their closeness to and distance from the work (Nzinga et al. 2018). Each author on this paper is "close to" and "distant from" the work of our partnership in some way. To make this more transparent to readers and each other, we share brief background information about the authors below and weave into the narrative some of the experiences and perspectives we brought at this point in our lives.

4.1.1. SVL Staff

Solicia Lopez is an Indigenous Chicana rooted as an educator, activist, and community leader. She is building her legacy on growing others and investing in her community. She was raised and educated in Denver, attending Metropolitan State College of Denver for her undergraduate studies and Regis University for her graduate studies. Magnolia Landa-Posas is a Mexican and Chicana educator. She was born and raised in Aurora, Colorado and attended the University of Colorado Boulder, where she studied ethnic studies and education. Her work is grounded in educational justice, liberatory pedagogies, and the belief that every single student holds precious and beautiful knowledge. Kathleen (Katie) Terrazas Hoover is a Chicana-Mestiza, born and raised in Northwest Indiana, just outside of Chicago. Her experiences growing up in a highly segregated area among working-class families raised many unanswered questions in her youth but ultimately seeded her commitment to work towards racial and class justice. Her praxis focuses on understanding and creating educator learning communities, experiences, and curricula that support educators' roles as critical change makers in deep partnership with youth for education justice.

4.1.2. CCI Researchers from CU Boulder

Monserrat (Monse) Estrada Martín is a first-generation, Mexican-American, gender-neutral person from the Denver Metro area. Estrada Martín majors in Evolutionary and Ecology Biology with minors in Leadership, Computer Science, and Public Health. Laura-

Elena Porrás-Holguín is a first-generation Latina college graduate who studied sociology at CU. Her goals focus on giving back to the Latinx community and expanding her knowledge on community outreach and self-advocacy for underrepresented groups. Joanna Mendy is a Gambian-American student from Aurora, Colorado. She double majors in Political Science and Sociology, with a minor in Leadership Studies. Melissa Campanella is a cis-white female Denver Public Schools graduate and former teacher and was involved in the 2011–2012 school year CCI teacher cohort. She came to care about justice and activism early in life while observing how she was constructed as “gifted” while her disabled brother Christopher was constructed as “disruptive” in school. Ben Kirshner is a white male teacher and researcher whose commitments to supporting youth voice and activism were catalyzed by his work as an educator in youth organizations in the San Francisco Bay Area. He prioritizes relationships in his research and values opportunities to participate in multigenerational and multiracial collectives that use research to advance social justice change.

4.2. Data Sources

Our claims in this paper are based on group analysis and individual reflections about the process we began in September 2020 to analyze data and generate findings that could be useful for students and coaches. Our primary data are internal meeting notes, data analysis memos, and presentation slides that were shared with and annotated by students and teachers.

The detailed meeting notes enabled us to reconstruct and reflect on our process for the narrative section of this paper. They document planning, decision making, reflections, and analytic discussions, including records of who said what. Campanella also periodically created reflection tables where each participant wrote their thoughts in separate rows and then annotated each other’s responses with comments in the margins, modeled after a similar process she participated in with a different RPP (Penuel et al. 2022). The notes also branch out to linked workspaces, such as Google sheets and slides, where we iterated on codebooks, claims, and participation structures for sessions with students and coaches. The records of our virtual meetings with secondary partners include the comments and annotations that the students and coaches added to slides and documents.

4.3. Process of Analysis and Writing for This Paper

Analyzing and writing about the process was not linear. We find Gravemeijer and Cobb’s (2013) notion of *mini and macro cycles of analysis* in Design Based Research to be a useful framework for describing our process. *Mini cycles* occur during a “prototyping phase”, where initial assessment of an intervention drives iteration on shorter time scales (e.g., day-to-day, week-to-week, and month-to-month), while *macro cycles* are opportunities for reflecting back on the intervention as a whole, often culminating in recommendations for future improvement of the intervention (p. 15).

Our *mini cycles of analysis* occurred during the 2020–2021 school year as we were carrying out our prefigurative experiment in knowledge co-construction and included week-to-week research team meetings, targeted feedback and planning meetings with SVL partners, and post-session reflections. Part of our routine during these meetings was to discuss how the process was going and what we were seeing in the data. Section 5 includes examples of these conversations. *Macro cycles* occurred in the fall of 2021, after the conclusion of the initial prefigurative experiment, and included a series of overlapping moments of shared meaning-making and collaborative writing. These reflections included an element of looking back at and making sense of the initial experiment, but also looking forward to new possibilities for collaboration, and are described in further detail in Section 6.

In response to the challenge of coordinating busy schedules, we split up into two writing groups: Campanella hosted a weekly work block with undergraduate researchers as they were available, and Kirshner facilitated several conversations with the SVL team.

During each session, we continued to refine ideas and the structure of the paper, and Campanella and Kirshner met separately to coordinate those new insights across groups.

Reflective sessions with undergraduate researchers focused on looking back on how the CCI team worked together and how the group sought to recognize and leverage people's expertise. They explored the conjecture that interpersonal dynamics and a democratic approach to the collaboration of a subteam of CCI researchers offered a set of tools for co-constructing knowledge with the students and coaches. These reflections prompted a reframing of the paper around the concept of prefiguration. Analysis and writing sessions with the SVL team focused on telling the story of the SVL program and the partnership with CCI. SVL staff used the opportunity of this paper to develop new writing about the program. Just as importantly, these meetings delved into critical reflections about last year's data sessions and how to improve upon them in the future; this group spent most of its time imagining ways to learn from the data sessions to strengthen the place for data analysis in the coming year. We elaborate in the discussion and implications section.

5. A Prefigurative Experiment in Two Parts

5.1. Part 1: Collaborative Data Analysis and Politicized Care on the CCI Subteam

The university research team of undergraduate students, graduate students, and faculty worked during the fall of 2020 to identify relevant excerpts and emergent claims to share with SVL students and coaches. In looking back at the work of this group, we realized that its work—across lines of race, ethnicity, gender, class, positional role, and academic degree—embodied practices that the team sought to achieve with students and coaches. The work of this group from September to January prefigured, in certain ways, the kinds of collaborative co-construction of knowledge that the later feedback sessions sought to accomplish. We also believe that group members demonstrated politicized care through their efforts to affirm the potential of each of its members to contribute meaningfully to the research, while simultaneously recognizing and responding to the unequal impacts of the pandemic within a university and larger social context that privileged the interests of white students and faculty. This section, therefore, analyzes the evolution of this “CCI subteam” and practices that the group developed to make sense of the data and support each other along the way.

5.1.1. Assembling the CCI Data Analysis Team and Creating Norms

The subteam of CCI researchers brought varied types of expertise to the work. Conventional metrics of expertise, such as advanced degrees or years of schooling, bore little relation to the team members' knowledge and insight about SVL or the broader issues of student activism. When the coding process started, for example, Porras-Holguin had already worked with CCI for over a year and had completed ethnographic fieldwork in one of the schools, which meant she had a more direct understanding of current SVL student experiences than Kirshner, who had not conducted fieldwork in the SVL classrooms. Mendy and Estrada Martín, although newer to the team, brought expertise related to their study of intersectionality and social justice leadership in the University of Colorado's undergraduate Multicultural Leadership Scholars (MLS) program and used this knowledge to make sense of the data and the overall mission of SVL. Campanella, as a doctoral candidate who had completed fieldwork in two SVL classrooms, brought not just her knowledge of the SVL sites, but also seven years of secondary science teaching in the district, including one year when she experimented with CCI principles in her classroom. Kirshner's main contribution to the subteam was to draw on his prior collaborative research experiences to help facilitate a process that would offer meaningful roles and enable the team to pool its varied sources of knowledge to identify claims.

As the work unfolded, the three undergraduate student researchers, Porras-Holguin, Mendy, and Estrada Martín, prioritized commitments to justice for communities of color based on their lived experiences and work in the MLS pathway. Porras-Holguin explained this in one of the reflection sessions we held in preparation for writing this paper. For her,

learning that CCI had “a similar motivation” to that of MLS “helped me say okay, they have a similar goal, students of color and student voice, if I can continue this in a different location then I’ll push myself to be part of that community.” It was similar for Mendy, who joined this project to support our effort to move toward knowledge co-construction with students and coaches. She said, “I wanted . . . to see myself and other people of color reflected in the research. That’s something I carry when I do this work.” Estrada Martín regularly brought their experiences as a more recent high school graduate to bear on our work, continually returning to the affective dimension of student experiences in our data analysis.

The CCI subteam developed practices along the way that enabled the team to make progress while also accommodating the personal needs that came up during the multiple overlapping crises of 2020–2021 and which landed on each team member in different ways. They tried to develop a clear but flexible workflow. One tool they used on an ongoing basis was a “What, By Who, By When” table, where they would map out small goals, how they would divide up responsibilities, and how much time they hoped to spend on each task. During their biweekly meetings, they would check in to acknowledge how each person was showing up to the space that day. For example, they would sometimes start with “troubleshooting/getting help” or with simple, open check-ins where team members could share whatever they wanted or pass.

Porrás-Holguín later reflected that these check-ins, combined with flexibility around task assignments, were an important part of how the group demonstrated care for one another, stating that “having our calendar, and at the same time, space for ‘hey if you are behind, let us know, we can work things around’” embodied compassion while staying accountable to the work. Check-in conversations went beyond surface level niceties to delve into emotional and complicated aspects of their lives. This led to other important conversations and actions, such as, for example, supporting each other to navigate university policies about in-person versus remote classes given the different risks faced by members of our team and their families.

5.1.2. Collaborative Development of Emerging Claims

The CCI subteam tried to develop a way of working together that was reflexive about issues of power, privilege, and difference in the construction of knowledge. Their hope was to acknowledge and hold space for their differences, both academically and personally, and allow each researcher to develop lines of analysis that reflected their interests and expertise. Each researcher selected their area of focus for data analysis from the questions that had been co-developed with SVL and then worked in pairs to review the data and identify excerpts. Porrás-Holguín and Mendy chose to focus on the tactics students used to effectively make changes in their schools, as well as how students manage pushback from adult decision makers. Campanella and Estrada Martín opted for how students mentored new members of their school teams.

Each pair met to synthesize excerpts, document variation, and identify patterns across schools. The pairs then brought initial claims back to the CCI subteam for discussion. In these meetings, they shared overarching themes and particular excerpts that had caught their attention, then worked to summarize those themes into initial claims or hunches. Kirshner sought during these sessions to share “tricks of the trade” (Becker 1998) from prior data analysis experiences and ask questions that would help student researchers clarify their interpretations, such as, “What I’m hearing you say is . . . is that what you mean?” The pairs then transformed their ideas into succinct and accessible claims that could be shared and discussed. This process enabled undergraduate members of the team to develop claims about the data, starting with initial “noticings” and moving iteratively to their later articulation with students and coaches.

To illustrate this process, we describe the evolution of one claim about the value of “productive failure” for students. It started in February, when Mendy signed up to answer a question requested by the coaches: “What advice do students offer in interviews about

how schools and teachers (including coaches) can support student voice?" Kirshner created a Google spreadsheet and offered suggestions on how to review the data and identify themes. On March 4th, the first version of the claim was born, when Mendy wrote, "Letting students lead on projects/ideas, even when you as a coach/teacher know that it won't work out. Let them fail and learn from those mistakes." She then pulled five excerpts from across school sites that best exemplified this idea.

Once Estrada Martín joined Mendy, they decided to develop this idea further. They had initially titled the section, "Let Students Lead, but not too much" as a placeholder before they wrote, "Taking the Lead: . . . Students should be able to take ownership of their projects and coaches should be open to letting them fail." The focus, however, was still not fully centered on productive failure, but rather classroom structure and ownership of projects. Then Mendy and Estrada Martín presented their memo to the larger CCI research team, and one of the CCI doctoral student researchers, Beatriz Salazar-Núñez, shared a phrase she had developed and written about in relation to student activism, called productive failure (Salazar-Núñez 2020). Mendy and Estrada Martín continued to work on a way of phrasing the claim and supporting it with evidence, based on student interviews, that would be most concise and clear for coaches. They opted to select one representative quote per claim, embed relevant context into the quote, and use bold text to underscore key points (see Figure 1).

On power-sharing:

Student referred to a coach saying, "OK this is your guy's project, Now you make it your own. **Like instead of having me (referring to teacher) regulate everything that happens and mandating everything I want you (referring to students in SBOE) guys to take charge and really make the difference that needs to be made in our schools'** and I really **appreciate** that there's not a lot of teachers are like that because they're very authoritative."

On productive failure:

Student stated, "It didn't really go that well. Not really. But **he still supported us through it.** He told us it wasn't really going to work out, but since we wanted to do it he supported us through it...**And when it was over he was like now you learned. Now you know for the future...**So I think he really teaches us a lot about just going for it... **And if we're going to do it next year, it's going to be even better because we already learned from this year.**"

Student Suggestion 2-
Power-sharing
and Productive
Failure

Figure 1. Google slide with the claim about productive failure.

5.1.3. Preparing for Sessions with Students and Coaches

SVL staff put the CCI subteam on the agenda to meet with the students in February and with the coaches in April. (SVL held regular meetings with students and coaches every two weeks over Zoom). The student session focused on two topics: "supporting new Challenge 5280 members" and "navigating pushback from adults." Table 2 summarizes the agenda structure and prompts. The agenda went through a few revisions in response to feedback from SVL staff and other CCI researchers, including a notable change suggested by Salazar-Núñez to start the breakout groups by asking students to share expertise about the research questions, rather than by sharing the claims that CCI researchers had developed.

Table 2. Student Session Agenda.

Agenda Item	Breakdown
Opening (whole group)	<p>Introduced the research team and agenda</p> <p>Students opted in to either “supporting new Challenge 5280 members” or “navigating pushback from adults.”</p>
Middle (breakout groups)	<p><i>Both breakout groups</i></p> <ul style="list-style-type: none"> - Icebreaker - Elicited student ideas:
	<p><i>Supporting new members breakout group</i></p> <ul style="list-style-type: none"> - Your Expertise: What do you see as the best ways to work with new team members so that they feel included and invested in Challenge 5280? - Your Aspirations: What might be some things you wish you could try to support new team members, but have not been able to yet?
	<p><i>Navigating pushback breakout group</i></p> <ul style="list-style-type: none"> - Your Strategies: What do you see as the best ways to form alliances with adult decision makers or deal with adults who resist your ideas?
	<p><i>Both breakout groups</i></p> <ul style="list-style-type: none"> - Read and discuss excerpts - Reflect: What questions do you have? What is one thing you will take to your work?
Closing (whole group)	<p>Thanked everyone and invited students to respond to questions in the chat:</p> <ul style="list-style-type: none"> - Q1: What other questions would you like the research team to explore in the data about SVL? - Q2: What was the best thing about this “report back” session? - Q3: What’s one thing we should change about how we share research in the future?

Note. Following feedback from Salazar-Núñez, the agenda was revised so that both student breakout groups included time for students to share their existing expertise, aspirations, and strategies related to the focal topic.

An example of student responses from one of the four breakout groups is shown in Figure 2. Asking students to first share strategies for building alliances with or dealing with adults who resisted their ideas, before jumping into data and sharing the research team’s initial hunches, helped us to better center students’ wisdom and strengths in the data analysis conversation (Gordon da Cruz 2017).

The coaches’ session followed a similar structure in terms of using breakout groups to look at excerpts and explore how they might inform practice. Based on feedback provided by the coaches two months prior, CCI researchers had analyzed data around two topics: “strategies for sharing power” and “student recommendations for coaches” (Table 3).

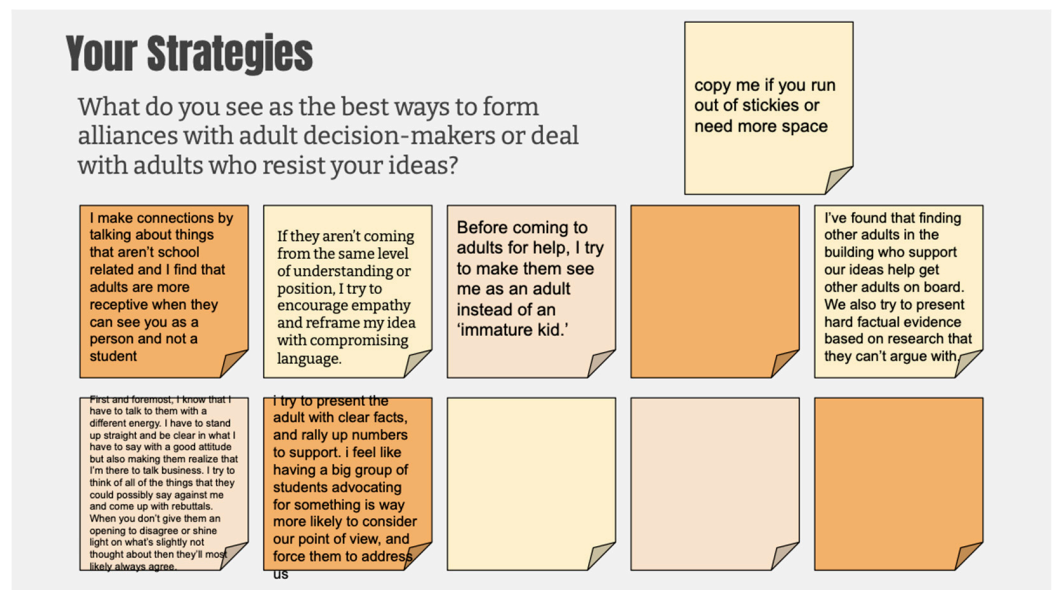


Figure 2. Starting breakout groups by asking for student expertise.

Table 3. Student Session Agenda.

Agenda Item	Breakdown
Opening (whole group)	Introduced the research team and session agenda Reviewed survey findings Described dilemmas of sharing power we have seen Listed a set of low-inference practices we documented for sharing power (e.g., students act as peer mentors, coach sets up clear routines for group decision making) Offered apprenticeship as a framework for sharing power, moving between “modeling inclusive and democratic leadership”, “coaching”, and “fading with intention” (Kirshner 2008)
Middle (breakout groups)	Shared excerpts from field notes of SVL teams where coaches “shared power” and asked coaches to annotate these excerpts and prepare to report back on themes
Closing (whole group)	Invited breakout groups to report back Shared student suggestions about what they wanted from coaches: <ul style="list-style-type: none"> • Teacher investment in the work • Power-sharing • Facilitating “productive failure” Thanked everyone and said goodbye

Note. After consulting with coaches, the session agenda anchored into two focal topics, strategies for sharing power and student recommendations for coaches. Undergraduate researchers Mendy and Estrada-Martín co-led the middle portion of the agenda and led the group in making sense of student recommendations.

Leading up to each session the CCI team also ran a “rehearsal”. This rehearsal changed significantly after the first session, because the CCI team was caught off guard by the number of students who participated with their video cameras off and some initial challenges fostering conversation. In preparation for the coaches’ session, therefore, the CCI team took the time to surface their nervousness about facilitation and to help each other think through and practice approaches to managing anxieties and better connecting with coaches on a human level. They collaborated to generate Table 4, summarizing possible talk moves, as a support.

Table 4. Facilitator moves for session with coaches.

Challenge	Possible Responses
Blank screens	“We invite you to keep your camera on, and we want you to take care of yourself and do what you need to do. If you can’t keep your camera on, consider using the reactions or chat, and type into our shared docs, or unmute.”
Making connections quickly with people we do not know	Humanize yourself, share something short so people can get to know you as a human.
If icebreaker fails	Personalizing icebreaker question and having a backup question
Sometimes people can be negative or disagree with each other	Know they might be prickly. e.g., “my students wouldn’t say that, I can’t do that b/c” Respond with “that’s interesting, let’s come back to that” / “what might others think?”
Feeling rushed	Take a breath, be present.
Awkward silence	Remember it is not your time to fill space, give think time. Breathe. Remember they might be thinking.
Feeling nervous	Being honest about it. “I’m a little nervous! Hope you all will help me out”

Note. To better prepare for the relational aspects of facilitating a collaborative knowledge building session, CCI researchers reflected on challenges from the first session with students and brainstormed possible ways to respond prior to the second session with coaches.

5.1.4. Disrupting Lingering Assumptions about Expertise

As the session with the coaches approached, questions about who should lead which sections of the session arose for the team, and they approached this decision collectively. Kirshner was not able to attend, and Estrada Martín and Mendy had worked on a section of findings summarizing student suggestions for how to make schools more socially just. Kirshner, Mendy, Porrás-Holguin, and Estrada Martín had some doubts and insecurities about undergraduate students taking on more of a lead facilitator role in engaging coaches with these suggestions. Mendy was concerned, for example, about how to present these suggestions to experienced teachers in a way that felt respectful. Estrada Martín described it this way:

[I] definitely [felt] nervous being that I knew I’d be leading a group of people that were most likely all older than me, but overall, I was excited and felt privileged to be able to take on a role like that. Felt trusted by the group and supported to know exactly what I needed to do to be an effective leader in that setting.

Kirshner and Campanella gave some suggestions on how to frame the suggestions using more affirmative language. Ultimately, Estrada Martín and Mendy led this portion of the meeting. The coaches’ comments in the chat indicated that this was one of the most powerful portions of the session.

In a post-session reflection in our shared Google doc, Kirshner wrote in response to the prompt *What worked well that we should celebrate?*

I was nervous about not being there . . . but it became clear to me as we prepared that the group was ready for a high quality presentation . . . Closely related, I want to celebrate the undergraduate student researchers, because, I confess, at first I wasn’t sure how we should divvy up the facilitating of the small groups and various presentation parts (and wondered if coaches would have biases against being taught by undergraduate students), but after seeing the quality of ideas and preparation from Porrás-Holguin, Mendy, and Estrada Martín my thinking changed and I realized I had also been working with biases about age and education that were wrong a (and the kinds of biases we try to challenge in CCI!)

Looking back, challenging these kinds of assumptions within the CCI subteam was an important part of moving toward community-engaged scholarship that is “[g]round[ed] . . . in asset-based understandings of community” and “[avoiding] research that marginalizes communities and justifies inequity” (Gordon da Cruz 2017, p. 374). Ultimately, we believe we are less likely to collaboratively produce knowledge and share power with community partners if we are not also embodying those values in the day-to-day inner workings of our research team.

5.2. Part II: Co-Construction of Knowledge with Students and Coaches

In addition to analyzing the approach to collaboration within the CCI subteam, we are also interested in assessing our efforts at the co-construction of knowledge with SVL students and coaches. What kinds of new knowledge did the two data-sharing sessions generate about learning and teaching in SVL? Did these sessions inform their praxis as activists and educators? In this section, we argue that the students and coaches expanded our initial understanding by speaking to the emotional dimensions of their experiences in SVL.

5.2.1. New Analyses and Lenses

Evidence that the sessions opened up new insights and directions for inquiry can be seen in the emphasis that students and coaches placed on experience and emotions when making sense of the data. Their responses to excerpts suggested that they were seeing themselves in the scenes (rather than as detached observers), and, perhaps because of this, they named emotional nuances and dimensions that the researchers had not considered. Students and coaches responded to the data in ways that were embodied, experiential, and personal.

Consider the interview excerpt that began this article, in which a student recounted her experiences challenging a School Resource Officer’s rationale for why he parked his police car in front of the school’s entrance. Prior to sharing this excerpt with SVL students, Kirshner was excited about the various communicative strategies that the student used and her sophisticated analysis of the police officer’s language. Campanella, whose scholarly interests include social movement frame theory, saw how the student was framing the issue for the officer in creative and compelling ways (Benford and Snow 2000). In the breakout group, however, after the students were asked to read and comment on the example, they focused on the student’s bravery and courage. This emphasis on the emotional and relational dimensions of the data continued in the reflective part of the breakout group when students shared questions and comments. When asked for their takeaways, one student wrote, “Remember there are people who have your back even though you’ll face people that will push back and try to take your power away/ degrade you.”

A similar process occurred in meetings with the coaches, who brought different lenses to the data and foregrounded emotions in their meaning-making. In two of the three groups, the coaches reported feelings of nostalgia and sadness reading field notes from scenarios that took place before the pandemic. For instance, one field note described a situation where the SVL coach pulled the students into the hall to regroup them in their shared purpose as leaders of the team; this kind of face-to-face encounter was not possible after school had gone virtual. One coach wrote that they “miss the in-person experience.” Later, in her reflection about the breakout group conversation, Mendy noted a sense of “mourning” that came up in the small groups:

I think one thing we didn’t account for was the sort of “mourning” that would happen when we talked about our data. It occurred to me that this year’s SVL projects would look different due to the remote learning, but I almost felt bad telling the coaches that they should leave room for productive failure when they felt like there was hardly any productivity in their classrooms to begin with.

If this had been framed more like a member check, then we might view these additions as a sign that we had “gotten it wrong”. Instead, viewing sessions as an opportunity for

co-construction of knowledge brought out the generative possibilities of bringing people together from different subject positions to analyze data.

5.2.2. Evidence of Usefulness

Although the notes from the breakout groups show examples of collaborative meaning-making, they are less clear about the extent to which the participants felt the sessions were useful to their work. On one hand, the opportunities for annotations by students enable us to see some of their reflections and feedback. The reflective post-its (Table 5), where we asked students to share their takeaways from the session, suggested that those who responded found insight and value in the ideas that came up in the data discussion. (Unfortunately, we did not have time for the same prompts in the coaches' session.) Moreover, in the closing chat, the most common response was appreciation for seeing and learning about the work of teams from other schools. Students liked learning "how other teams deal with these topics" or "how others handle it." Students also expressed interest in learning more about "components of policies that have been effective in the past", "How to expand out projects . . . to the whole school or outside of school", and "It would be very cool to learn more about how other teams have succeeded in collecting data and building relationships with teachers and staff that can help them with their projects." One student later emailed Kirshner to ask if she could share the presentation with her SVL team and discuss the relevance to her school's project. SVL program staff also shared their impression that the students felt they could relate to the scenarios and found it affirming. One student shared with Landa-Posas informally that they felt the report proved that SVL work was important and that they wanted to share it with their team.

Table 5. Examples of "takeaways" on post-its written by students.

Topic Group	Takeaways from Analyzing the Excerpts Together
Supporting new Challenge 5280 members	<p>Communication is really important and making mistakes will accomplish something else. Also that being serious all the time might be scary</p> <p>Make sure to include everyone and not let adults have to run all conversations</p> <p>Me and the other Reps sit around and wait for our coach to see whats next—would like to step up our game and make sure that we are being the leaders and reps re need to be</p> <p>Interesting (to see SVL quotes). As reps to find our strenghts and challenges as reps—no mater how many—talking amongst each other and building on those and see ing how we can imporve to support our teams and especially new memenrs better</p>
Navigating pushback from adults	<p>Remember that adults often take our work personally and can be pretty touchy about it, so always act with respect and be pragmatic about how you talk to them</p> <p>Remember there are people who have your back even though you'll face people that will push back and try to take your power away/degrade you</p> <p>Facing pushback can be a tool to remind you why policy is needed and wanted.</p> <p>I think my team's work, especially this year, we really need to strategize on how to get teachers on our side. I anticipate some pushing back without knowing the full implications of their decision to do so. Because of this, I believe developing methods to address this is important.</p> <p>I think that I learned that advocating for myself and my team is super important and I should use my position and not be scared of outcomes</p>

6. Discussion and Implications

The process of analyzing and sharing data started with a dilemma: in CER projects which have a clear division of labor between researchers and hundreds of community partners, how can we still design opportunities for meaningful sensemaking and co-production of knowledge to inform praxis? CCI researchers and SVL staff spent several years developing norms for working together and collaborating on data collection, analysis, and program strategy. Together, they designed the CCI curriculum and district-wide programming to support the type of school-based transformative student voice work exemplified by the Moraga High School SBOE team's campaign to reunify their campus. The CCI researchers' relationships and collaboration with SVL staff embodied the core principles of community-engaged research, including criticality, reflexivity, and expansive notions of expertise (Tuck and Guishard 2015; Warren et al. 2018). However, with a few important exceptions, the CCI researchers did not have the same kind of collaborative relationship with the students and teachers. After two years of immersive data collection with nine SVL teams, punctuated by a brief findings presentation after Year 1, it was past time to design opportunities for collaborative meaning-making with students and coaches across SVL schools.

Contributing to this special issue's focus on co-producing knowledge for justice, including its call for more robust roles for undergraduate students in community-engaged research, the first part of our findings described processes of data analysis and claim development in the CCI subteam. This team, too, faced questions about how to analyze data together. Team members were mostly new to each other; they brought different life experiences, positional identities, and roles and held different kinds of knowledge about the topic of student voice and leadership. Importantly, they also had different amounts of time available to work on this project and could only meet online because of the pandemic. In many ways, then, the internal task facing the subteam approximated the larger task of finding meaningful opportunities to co-construct knowledge with SVL students and coaches.

Looking at it this way, we found it useful to draw on the lens of *prefigurative experiments* to identify practices that the subteam developed. Although there is always room to do the work better, certain key practices seemed to have helped this group leverage its differences in identity and minimize intrusions of university hierarchy to engage in productive co-construction of data for action. Two practices stood out: iterative development of emerging claims and politicized care for each other. The iterative process enabled each member of the team to see through their initial hunches all the way to more confident claims; either alone or in pairs, the researchers took responsibility for developing their ideas, finding appropriate evidence, revising ideas in response to questions, and formulating them in ways that were accessible to the students and coaches. Along the way, practices of politicized care enabled team members to resist predictable ways of assigning expertise in data analysis and to show compassion during a time of simultaneous societal crises. Team members sought to balance accountability to the project with tenderness to themselves and each other.

When it came time to share emerging claims with students and coaches, the CCI team designed Zoom sessions that were intended to elicit the partners' expertise about the phenomenon and also use data excerpts to make the familiar strange, that is, to see their work in new and, ideally, useful ways. From the perspective of co-constructing knowledge, the sessions were successful insofar as the dialogue that emerged generated views and commentaries that had not been part of the original analysis. Students and coaches drew on lived experience to place themselves in the excerpts and assign meanings to them. The students' identification of courage and bravery underscored the interpersonal and emotional dimensions of speaking truth to powerful people. The coaches, in turn, while reading excerpts that were from in-person school prior to the pandemic, mourned the loss of their face-to-face interactions with students. These interpretations complicated and humanized the data, turning them from words written on the page to memories and stories that resonated with the participants.

These meetings with students and coaches, however, were more like glimpses of what collaborative analysis could be than exemplars. Although the comments during the session show some evidence of engagement, we are skeptical about the overall value of the data sessions. They were limited in several ways: they took place online during time-constrained one-hour sessions. They occurred at a time in the year when both students and coaches were beginning to feel the urgency of completing their policy narratives and were less inclined to use precious time together to take a reflective pause. They were one-offs, with little foresight about how the conversations might be sustained. Beyond the comments shared during the session, we were not able to gather more detailed reflections about the sessions from the students and teachers. This lack of systematic student or coach feedback about the sessions limits our ability to make strong claims about their value.

Returning to the distinction we drew at the beginning of this paper between large-scale community-engaged research partnerships and smaller participatory collectives, these limitations raise questions about the possibilities of practicing mutuality with and accountability to all participants in large-scale complex partnerships. What are the tradeoffs to forming partnerships that involve hundreds of students if key ethical commitments, such as relationships, mutuality, and answerability (Patel 2015), are difficult to meet? Is there a place for research practice partnerships such as ours in the landscape of critical community-engaged research?

The short answer: we are not sure. With regard to this partnership between SVL and CCI, there were good reasons why it evolved the way it did. In its initial stages, beginning in 2016, CCI and SVL teamed up in smaller ways with just a few teachers and their students (Kirshner et al. 2020). In 2018, they decided to apply for—and were awarded—a major grant from the Hewlett Foundation that would help pay for a strategy to expand and strengthen SVL programming. SVL staff used this grant to create a new staff position to support coaches, expand programming to more schools, and enhance the stature of the work in the eyes of the district leadership. Although there is always the risk that scaling a program can lead to diluted quality, criticality, or impact, the partners saw this as a special opportunity to offer an alternative to well-funded neoliberal reform efforts that have dominated much of the education landscape in Denver and beyond (Lipman 2011). The award was an opportunity to lay deeper roots for SVL and influence district-wide strategy. Along the way, the CCI researchers could document key ingredients of the program, student outcomes associated with participation, and the district impacts (see, for example, Hipolito-Delgado et al. 2021a and Hipolito-Delgado et al. 2021b for analyses of student outcomes, Kirshner et al. 2021 for analysis of district-level changes, and Hipolito-Delgado et al. 2021c for implications of distance learning).

The growth of the initiative from 2018 to 2021, however, offered a stress test of sorts for the community-engagement commitments of the partnership. As noted in our introduction, SVL leaders and CCI researchers were able to maintain shared decision making and co-design among each other. However, aside from the kinds of relationships that emerged for those CCI researchers carrying out classroom ethnographies, the partnership as a whole had not developed routines for accountability to or co-design with the students and coaches. The students, of course, by participating in SVL programming, were part of rich PAR experiences directed towards transforming their schools. It is just that the research *about* that process did not itself follow a PAR model.

Though what we accomplished last year was limited and modest, we can learn and build on it. We see two practical contributions. First, we hope that by going behind the scenes to describe how we set up collaborative routines and designed sessions with the students and coaches, readers might gain specific ideas for how to design and structure processes of collaborative data analysis. Mendoza et al. (2018) argue that there is a need for articles that make visible how community research projects design and implement collaborative learning environments, rather than just report on their outcomes. Our account of the data analysis sessions with the students and teachers offered specific design ideas, such as foregrounded participant expertise and starting with excerpts rather than

findings. We would like our story to serve as an invitation to other RPPs to design and implement their own prefigurative experiments and consider alongside us how caring practices for collaborative knowledge building are enacted relationally and structured into group routines.

Second, we see *provocative generalizability*, which refers to the ways in which a study provokes new actions, at work in the process of writing this paper (Fine 2008). Conversations with the SVL team started out with a sober assessment of the limits of our effort to share findings in the prior year. The SVL partners emphasized the continued importance of the research in elevating their work within the district and helping them solve problems of practice, such as how to make student learning legible to the district's competency-based graduation requirements. Then, however, these reflective conversations segued into conversations about the upcoming year and how we could collectively use data in more robust ways. Looking back prompted us to look ahead not just by tinkering with how to "report back" better, but more imaginatively how we could strengthen the uses of data throughout the program.

In terms of bringing the research team's *means* for knowledge construction with the students and coaches into better alignment with our desired *ends*, our discussions led to a key change in approach. In contrast to the limitations of the prior year, SVL staff said that what would be most helpful would be to flip whose timeline and research questions get prioritized in the data sharing. Specifically, whereas last year the data sessions were with whole SVL groups (across schools), SVL staff suggested that CCI operate more like a "rapid response data team" that would consult with individual student teams as needed, such as a team that collects survey data and seeks assistance in how to analyze it efficiently. We are excited about this because it suggests a "just in time" use of research, where the purpose of looking at data is driven by student goals and timelines and closely related to their specific and unique projects. This arrangement is more emergent and unpredictable but potentially charts a promising direction for a large research partnership such as this.

Similarly, with regard to the coaches, SVL staff have asked for more advance coaching on how to facilitate data collection and analysis with their students. After all, facilitating research is not part of most teacher licensure programs, nor is it routinely part of professional development. Although CCI has offered some support for this through its curriculum, SVL staff have pointed to this as a need for more focused ongoing interaction.

Finally, this process has also fueled new ideas and motivation for sustaining meaningful roles for undergraduate researchers. In particular, we are moved to organize our work in ways that position undergraduate researchers as co-leaders in the research design, planning, and facilitation of collaborative knowledge building in the partnership. For example, SVL staff noted that in addition to reaching out to project PIs and graduate students for support with emergent research goals, SVL staff, students, and coaches would also like to call on undergraduate student researchers as part of a rapid response team.

In these ways, we saw the process of analysis and writing as provoking new ideas for practice, similar to Fine's conception, inspired by Maxine Greene, of *provocative generalizability* (2008): "does the work move readers to act?" (p. 229). Here, the work of reflecting on and writing about our process has moved *the writers* to act; we hope it offers generative tools for readers as well.

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